



# Monthly and Annual Rainfall Normals

BY

*GILBERT T. WALKER, C.S.I., Sc.D., F.R.S.*

The following tables contain the averages of the monthly and annual amounts of rainfall at all the stations maintained by the Imperial and Provincial Governments where records for at least five years are available. The number of years over which the data extend have been given for each station in order that an estimate may be formed of the reliability of the results.

## LIST OF TABLES.

TABLE	PAGE.
I. BURMA	2
II. ASSAM	16
III. BENGAL	26
IV. BIHAR AND ORISSA	42
V. UNITED PROVINCES	60
VI. PUNJAB	80
VII. KASHMIR	94
VIII. NORTH-WEST FRONTIER PROVINCE	98
IX. BALUCHISTAN	102
X. RAJPUTANA	106
XI. BOMBAY	118
XII. CENTRAL INDIA	140
XIII. CENTRAL PROVINCES, INCLUDING BIRAR	146
XIV. HYDERABAD	158
XV. MYSORE	160
XVI. MADRAS	166
XVII. STATIONS OUTSIDE THE INDIAN LAND AREA	200

TABLE I.

DISTRICT.	Station.	No. of years.	January.	February.	March.	April.
MERGUI	Mergui . . .	32	"	"	"	"
	Do. (Observatory) . . .	33	1.02	2.14	2.94	5.78
	Victoria Point : . .	16	0.28	0.59	0.75	4.68
	Maliwun . . .	7	0.78	1.21	1.44	2.46
TAVOY	Tavoy . . .	53	0.15	0.54	1.10	3.00
	Do. (Observatory) . . .	22	0.15	0.59	1.61	3.14
	Thayetchaung . . .	15	0.49	0.78	1.69	2.92
	Launglon . . .	15	0.03	0.37	1.26	2.50
AMHERST	Yebu . . .	12	0	0.46	0.79	2.51
	Moulmein . . .	32	0.27	0.20	0.42	3.01
	Do. (Observatory) . . .	33	0.25	0.19	0.43	2.90
	Amherst . . .	8	0.06	0	0.45	2.62
THATON	Kawkareik . . .	8	0.09	0.07	0.77	2.02
	Thaton . . .	19	0.01	0.30	0.66	3.25
	Kyaikto . . .	15	0.02	0.30	0.46	1.16
	Bilin . . .	19	0	0.15	0.36	2.32
TOUNGOO	Pa-an . . .	8	0	0.11	0.78	2.35
	Toungoo . . .	41	0.10	0.18	0.30	1.78
	Do. (Observatory) . . .	33	0.13	0.22	0.36	1.97
	Shwegen . . .	42	0.09	0.35	0.37	1.96
SALWEEN	Kyaukkyi . . .	19	0.01	0.15	0.18	0.82
	Thandaung . . .	6	0.33	0.46	1.55	1.18
	Papun . . .	20	0.05	0.26	0.55	2.16
	Pegu . . .	20	0.05	0.63	0.51	1.46
PEGU	Nyaunglebin . . .	11	0.02	0.33	0.71	0.49
	Rangoon . . .	40	0.09	0.25	0.32	1.60
RANGOON TOWN	Do. (Observatory) . . .	32	0.09	0.26	0.37	1.58
	Kyauktan . . .	19	0	0.23	0.70	1.50
HANTHAWADDY	Tharrawaddy . . .	31	0.12	0.41	0.28	0.99
	Gyobingauk . . .	19	0.04	0.11	0.34	0.79

## BURMA.

May.	June,	July.	August.	September.	October	November.	December.	Annual
"	"	"	"	"	"	"	"	"
19.02	31.21	32.75	30.70	27.68	12.37	3.49	0.36	169.46
18.20	29.29	30.99	29.43	27.22	12.35	3.46	0.37	163.22
22.87	26.19	31.32	27.22	28.29	14.72	6.10	1.09	164.10
18.94	22.99	27.41	25.26	28.75	16.10	9.46	1.64	156.44
20.10	40.95	47.01	43.76	33.61	10.05	2.43	0.16	203.79
25.49	42.67	48.07	46.14	34.81	10.33	2.63	0.21	215.84
29.12	47.18	48.29	47.33	32.63	12.10	3.25	0.21	225.99
29.41	47.17	52.36	51.24	36.75	10.87	2.23	0.11	234.33
25.09	42.45	50.39	48.67	37.03	9.78	1.74	0.05	218.96
20.35	35.60	40.35	43.42	26.08	8.50	2.07	0.07	188.34
20.69	35.52	45.51	42.86	28.34	8.71	2.19	0.07	187.86
26.63	37.77	49.75	44.03	37.16	13.26	1.64	0.34	213.91
18.28	29.69	37.95	39.71	25.62	10.21	2.50	0	166.91
21.76	42.30	51.21	49.19	32.81	11.33	1.86	0.06	217.97
21.16	38.33	43.21	43.19	30.75	9.78	1.64	0.06	190.06
20.71	40.39	46.76	43.95	29.47	8.88	1.83	0.09	194.91
18.03	31.44	45.82	42.95	24.18	8.79	1.47	0.08	179.30
6.98	13.90	17.46	18.47	12.11	7.13	1.64	0.20	80.55
6.98	14.35	17.60	18.66	12.39	7.42	1.74	0.24	82.26
12.18	27.71	34.48	32.31	19.53	9.47	1.79	0.12	140.36
12.51	23.71	30.46	26.93	23.10	8.64	2.46	0.24	129.21
18.76	41.64	57.49	51.99	36.45	16.15	5.07	0.09	231.16
13.16	22.55	25.58	22.61	15.37	7.08	1.54	0.22	111.16
13.39	23.20	26.81	30.26	20.47	6.68	1.93	0.09	127.48
11.77	23.40	31.34	30.36	19.38	8.40	1.58	0.15	127.93
12.41	18.09	21.17	19.52	15.65	6.97	2.47	0.12	98.66
12.23	17.57	20.93	19.67	15.63	6.75	2.38	0.15	97.63
15.01	20.08	22.94	22.91	17.63	8.07	3.13	0.20	112.45
8.70	15.68	21.38	19.13	13.10	5.53	1.78	0.27	87.37
7.89	12.41	13.71	12.29	9.37	4.75	1.92	0.18	63.80

TABLE I.

DISTRICT,	Station.	No. of years.	January.	February.	March.	April.
			"	"	"	"
THARAWADDY —concl.	Monyo	13	0.03	0.18	0.40	0.32
	Minhla	8	0.02	0	0.57	0.25
	Zigon	18	0.02	0.13	0.23	0.87
	Tapun	18	0.04	0.08	0.25	0.59
PROME	Prome	41	0.04	0.08	0.17	0.83
	Shwedaung	19	0.07	0.18	0.27	0.74
	Paungde	19	0.02	0.11	0.22	0.59
	Maubin	32	0.08	0.38	0.34	1.54
MAUBIN	Dauubyu	19	0.02	0.07	0.36	1.15
	Yandoon	19	0.06	0.22	0.31	1.56
	Pantanaw	19	0.02	0.33	0.67	1.58
	Pyapon	19	0.02	0.31	0.44	1.33
PYAPON	Dedaye	19	0	0.37	0.64	1.04
	Bassein	41	0.13	0.29	0.18	1.20
	Do. (Observatory)	33	0.10	0.36	0.19	1.25
	Ngaputaw	19	0.01	0.22	0.55	1.23
BASSEIN	Diamond Island (Observatory)	31	0.18	0.20	0.23	1.03
	Ngathainggyaung	19	0.04	0.10	0.31	0.95
	Kyonpyaw	19	0.01	0.11	0.43	0.73
	Kangyidaung	17	0.11	0.31	0.46	0.93
MYAUNGMYA	Myaungmya	19	0.01	0.20	0.42	0.89
	Einme	6	0	0.17	0.93	0.88
	Wakema	19	0.01	0.28	0.31	1.01
	Henzada	40	0.05	0.19	0.16	0.73
HENZADA	Ingabu	19	0	0.04	0.27	0.85
	Kanaung	19	0.04	0.13	0.30	0.54
	Zalun	18	0.01	0.17	0.53	0.88
	Myanaung	36	0.05	0.10	0.17	0.79
Kyaingin	Kyaingin	19	0.05	0.13	0.21	0.45
	Lemyethna	19	0	0.09	0.27	0.62

## BURMA.

May.	June.	July.	August.	September.	October.	November	December.	Annual.
"	"	"	"	"	"	"	"	"
7.15	14.41	16.15	12.31	10.19	4.38	1.64	0.09	67.25
9.52	16.13	16.01	14.02	15.55	4.85	3.43	0.34	80.69
7.12	11.64	13.02	10.53	9.39	4.98	1.53	0.19	59.65
6.81	9.93	9.87	8.18	8.90	4.60	1.27	0.16	50.68
5.28	9.01	9.26	8.87	7.23	4.39	1.76	0.12	47.04
5.05	9.79	10.57	7.79	8.37	4.67	1.36	0.29	49.15
6.48	9.16	10.23	8.85	9.39	4.73	2.00	0.19	51.97
12.10	17.40	21.44	19.60	13.89	6.37	2.70	0.24	96.08
9.53	17.00	20.81	16.58	13.03	4.90	2.09	0.15	85.69
11.19	16.59	20.66	18.49	13.02	5.40	1.64	0.14	89.28
11.36	16.81	21.20	17.76	13.53	5.68	1.92	0.16	91.07
12.04	19.10	18.96	18.16	13.31	5.94	2.49	0.50	92.60
13.59	18.70	20.64	17.94	13.49	6.69	2.16	0.24	95.50
9.74	21.62	25.08	22.66	15.32	7.88	3.03	0.24	107.87
10.27	22.99	24.77	22.93	15.48	8.00	3.14	0.29	109.77
13.24	26.52	28.07	24.91	18.88	9.30	2.78	0.31	126.02
11.16	23.77	25.54	23.21	17.72	8.11	4.71	0.75	116.61
10.15	18.93	24.89	20.78	12.28	5.67	2.29	0.18	96.57
10.57	18.23	25.14	22.17	13.67	7.42	2.11	0.27	100.86
12.24	20.16	24.38	22.45	13.64	7.24	1.80	0.21	103.93
12.43	21.48	21.84	21.34	16.69	7.00	2.97	0.35	105.62
9.38	16.08	18.81	15.96	12.30	6.02	3.68	0.57	84.78
12.33	18.60	20.58	19.62	13.59	6.27	2.47	0.29	95.36
7.61	16.09	21.48	18.35	11.40	5.07	1.82	0.11	83.06
8.41	15.46	20.24	15.30	11.16	4.72	1.43	0.15	78.03
5.42	11.10	10.71	7.93	8.31	4.32	1.52	0.15	50.47
8.89	15.52	20.72	17.60	11.67	4.64	1.32	0.20	82.15
5.79	10.63	10.73	9.98	8.61	4.65	2.11	0.21	53.82
6.41	9.63	11.10	10.41	9.26	4.68	1.59	0.23	54.15
8.99	17.90	23.89	17.63	11.46	4.76	1.16	0.14	89.31

TABLE I.

District.	Station.	No. of trees	January.	February.	March	April.
THAYETMYO	Thayetmyo . . .	41	0.03	0.10	0.17	0.78
	Do. (Observatory) . . .	33	0.03	0.12	0.18	0.81
	Kama . . .	19	0.01	0.16	0.01	0.77
	Mindon . . .	19	0.03	0.15	0.31	0.74
	Myedo . . .	19	0.04	0.14	0.29	1.08
	Minhla . . .	19	0.02	0.08	0.24	1.23
MAGWE	Magwo . . .	22	0.02	0.07	0.23	0.83
	Taungdwingyi . . .	21	0.02	0.10	0.23	0.70
	Yenangyaung . . .	17	0.02	0.04	0.22	0.17
	Natrank . . .	16	0.05	0.07	0.27	0.66
	Satthwa . . .	7	0	0.16	0.56	1.00
	Myothit . . .	7	0.01	0	0.55	1.20
MINBU	Minbu . . .	21	0.01	0.07	0.33	0.76
	Do. (Observatory) . . .	17	0.03	0.10	0.11	0.93
	Salm . . .	19	0.03	0.07	0.22	0.62
	Sidoktaya . . .	11	0.09	0.02	0.15	0.75
	Ngape . . .	11	0.01	0.03	0.17	0.80
	Aingma . . .	7	0.03	0.03	0.32	1.23
PAKOKKU	Linzin . . .	7	0.05	0.01	0.41	1.09
	Mezali . . .	7	0.01	0	0.13	0.88
	Pakokku . . .	22	0.01	0.07	0.26	0.46
	Gangaw . . .	21	0.01	0.07	0.48	1.12
	Pauk . . .	16	0.01	0.01	0.26	0.81
	Saw . . .	11	0	0.03	0.37	0.11
PAKOKKU	Seikpyu . . .	11	0.02	0.05	0.27	0.81
	Myaing . . .	11	0	0.05	0.37	0.62
	Tilin . . .	7	0	0	0.13	0.89
	Tabya . . .	7	0	0	0.19	0.67
	Pyinchaung . . .	7	0	0	0.48	1.18
	Yebu . . .	7	0	0	0.21	1.03

## BURMA.

May.	June.	July.	August.	September.	October.	November.	December.	Annual.
4.85	6.86	7.21	6.98	6.68	4.31	1.66	0.16	39.79
4.53	6.53	6.77	6.25	6.19	4.01	1.67	0.20	37.34
5.94	8.22	8.94	7.76	6.70	3.78	1.37	0.24	43.90
6.34	10.13	9.08	7.84	8.03	5.19	1.41	0.40	49.68
4.91	6.06	7.02	6.15	5.91	4.06	1.25	0.18	37.09
4.39	5.28	4.13	4.57	5.99	4.45	1.47	0.43	32.28
4.94	5.25	3.78	4.90	5.22	4.23	1.48	0.36	31.31
4.94	6.26	6.49	7.03	7.70	4.49	1.69	0.23	39.88
3.59	3.99	2.74	3.58	3.88	3.56	1.64	0.29	24.04
4.06	5.38	3.97	4.28	3.95	4.03	2.20	0.33	29.25
6.23	7.09	7.22	7.40	8.23	5.63	2.60	0.22	46.43
4.57	5.93	4.18	4.15	5.41	3.38	1.28	0.08	31.07
4.57	5.22	3.86	5.10	5.80	3.90	1.79	0.34	31.78
5.00	5.55	4.19	5.12	6.19	4.51	1.81	0.46	34.33
3.94	4.67	2.77	4.24	5.83	3.94	1.50	0.26	28.09
4.07	9.85	6.62	7.65	9.52	6.68	2.32	0.32	43.34
4.41	8.00	5.34	5.15	7.58	6.27	2.35	0.41	41.47
5.15	5.56	4.20	4.91	6.20	3.98	3.11	0.45	36.15
4.55	5.84	2.65	4.58	6.31	4.61	3.06	0.51	34.26
5.04	6.87	3.06	4.68	7.38	4.31	2.69	0.45	35.83
3.07	3.92	2.14	4.16	5.14	3.78	1.22	0.25	23.88
6.12	8.29	7.02	8.63	7.76	5.24	1.41	0.25	46.60
4.02	5.28	3.61	5.55	7.05	4.83	2.29	0.28	34.93
4.74	7.70	5.81	7.86	11.07	7.29	2.38	0.43	48.08
2.04	3.50	2.18	3.37	5.01	4.29	1.96	0.31	24.74
4.44	3.78	2.76	5.19	6.09	4.71	2.37	0.28	30.69
6.69	7.23	8.05	7.22	10.40	7.52	2.74	0.35	51.82
3.41	3.77	2.51	2.45	5.29	4.58	2.13	0.04	25.03
4.26	4.46	2.65	3.90	6.84	6.15	2.58	0.31	33.11
8.80	14.56	5.80	6.85	11.34	7.05	3.87	0.20	50.80